



Dart Aerospace Ltd.  
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Hawkesbury, ON  
K6A 1K7  
Canada

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**RBE117-15004W6-13**  
**Job Sheet 191227**



Part No: RBE117-15004W6-13

Job Qty: ~~6~~ pcs *10 pcs*

Part Name: Thrust Piece



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/25/19

Job Tracking No:

Due Date: 4/15/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBE117-15004W6 Rev.1 IPP Rev. A 18.12.20 New issue DP Verify DD

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation  | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off           |
|-------|------------|-------|------------|----------|-----------|---------|-----------------------|-----------|--------------------|
|       |            |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |                    |
| 100   | SL-154 - 1 | 6 pcs | 4/15/19    | 4/15/19  | 0.00      | 3.00    | SL-154 - 1            |           | <i>MP 19/04/24</i> |
| 110   | QC 2       | 6 pcs | 4/15/19    | 4/15/19  | 0.00      | 0.00    | QC 2 - 1              |           |                    |
|       |            |       |            |          |           |         | QC 2 - 12             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 14             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 17             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 19             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 2              |           |                    |
|       |            |       |            |          |           |         | QC 2 - 20             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 22             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 23             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 25             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 32             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 33             |           | <i>MP 19/04/24</i> |
|       |            |       |            |          |           |         | QC 2 - 35             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 39             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 4              |           |                    |
|       |            |       |            |          |           |         | QC 2 - 40             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 44             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 45             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 48             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 49             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 50             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 51             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 52             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 54             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 56             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 57             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 62             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 63             |           |                    |
|       |            |       |            |          |           |         | QC 2 - 8              |           |                    |



Container No: S174648



Part: RBE117 - 15004W6 - 13

Job No: 191227

Serial No/Batch: S174648

Revision: 1

Inspector:

Exp Date:

Instructions:

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Date: 04/24/19

|     |                              |       |         |           |                             |                    |
|-----|------------------------------|-------|---------|-----------|-----------------------------|--------------------|
| 112 | Conventional Lathe - 1 - B4B | 6 pcs | 4/15/19 | 0.00 0.00 | Conventional Mill - 1 - B4B |                    |
| 114 | QC 2                         | 6 pcs | 4/15/19 | 0.00 0.00 | QC 2 - 1                    | 11/19/4/24         |
| 120 | QC 8                         | 6 pcs | 4/15/19 | 0.00 0.00 | QC 8 - 12                   | ml 19/04/27        |
|     |                              |       |         |           | QC 8 - 14                   |                    |
|     |                              |       |         |           | QC 8 - 17                   |                    |
|     |                              |       |         |           | QC 8 - 20                   |                    |
|     |                              |       |         |           | QC 8 - 25                   |                    |
|     |                              |       |         |           | QC 8 - 3                    |                    |
|     |                              |       |         |           | QC 8 - 32                   |                    |
|     |                              |       |         |           | QC 8 - 33                   |                    |
|     |                              |       |         |           | QC 8 - 35                   |                    |
|     |                              |       |         |           | QC 8 - 39                   |                    |
|     |                              |       |         |           | QC 8 - 4                    |                    |
|     |                              |       |         |           | QC 8 - 44                   |                    |
|     |                              |       |         |           | QC 8 - 45                   |                    |
|     |                              |       |         |           | QC 8 - 49                   |                    |
|     |                              |       |         |           | QC 8 - 58                   |                    |
|     |                              |       |         |           | QC 8 - 8                    |                    |
|     |                              |       |         |           | QC 8 - 9                    |                    |
|     |                              |       |         |           | QC 8 - 68                   |                    |
| 130 | Packaging 3-1 - Stock - B4B  | 6 pcs | 4/15/19 | 0.00 0.00 | Packaging 3 - 1 - B4B       |                    |
|     |                              |       |         |           | Packaging 3 - 2 - B4B       |                    |
|     |                              |       |         |           | Packaging 3 - 3 - B4B       |                    |
|     |                              |       |         |           | Packaging 3 - 4 - B4B       |                    |
|     |                              |       |         |           | Packaging 3 - 5 - B4B       |                    |
| 140 | QC 21 - SA                   | 6 pcs | 4/15/19 | 0.00 0.00 | QC 21 - SA - 21             | DAS 28 9-89        |
|     |                              |       |         |           | QC 21 - SA - 70             | DAS 21 APR 29 2019 |

Part Op 100 - 1-Machine as per folio FC557 FOLIO REV: AA DWG REV: 1 2-Deburr 9-39

Descriptions: 112 - -Machine as per DWG  
130 - .

| Job BOM     |                                               |                    |                |           |
|-------------|-----------------------------------------------|--------------------|----------------|-----------|
| Part / Item | Component Name                                | Quantity           | Operation      | Container |
| 8497K411    | Acetal Rod, White, 1-3/4" Diameter, 4 ft Long | .8100 ft (.135 ea) | 100-SL-154 - 1 | 5162401   |

| Job Allocations |                |          |           |           |
|-----------------|----------------|----------|-----------|-----------|
| Operation       | Component Part | Required | Inventory | Allocated |
| 100-SL-154 - 1  | 8497K411       | 1        | 4         | 0         |

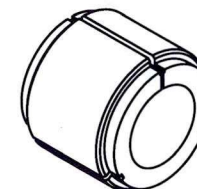
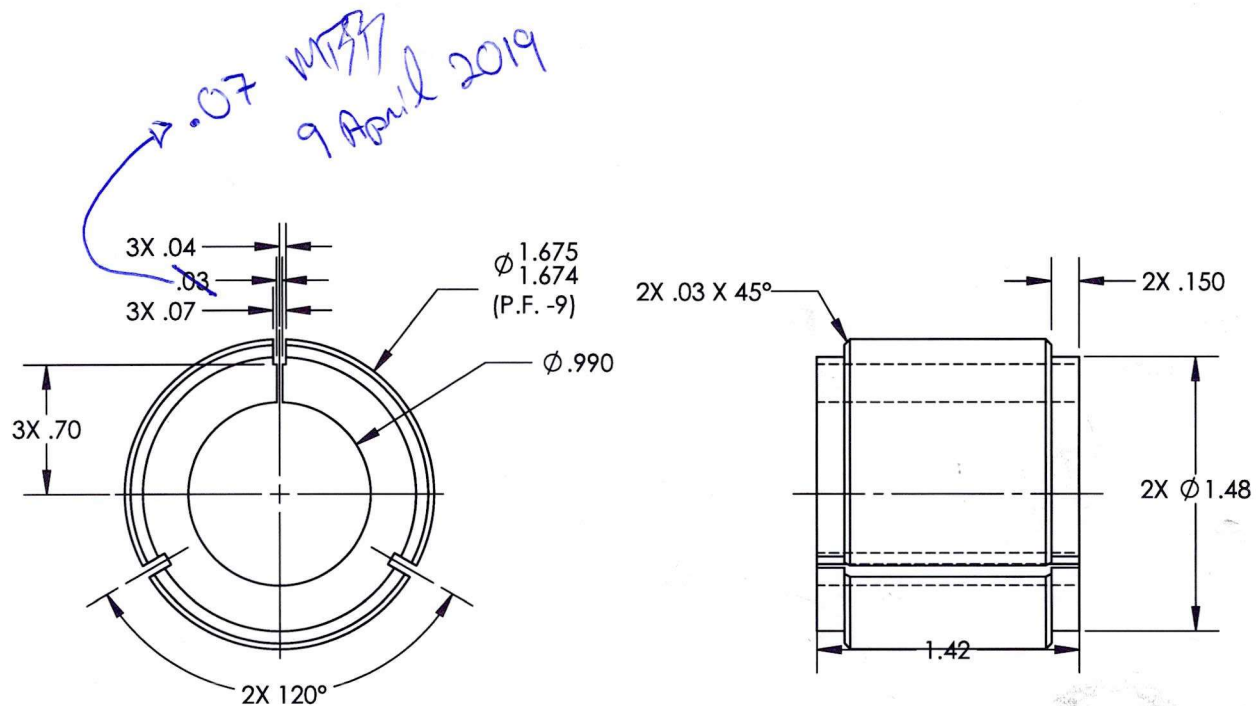
| Part Specifications                |  |
|------------------------------------|--|
| Specifications could not be found. |  |





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| REVISIONS |     |             |      |         |          |
|-----------|-----|-------------|------|---------|----------|
| REV       | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |



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WITHOUT NOTICE  
WORK ORDER  
NO. 191227 MWS  
19-02-25

(13)

THRUST PIECE

|                                                                                                                                                                                                  |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>DART<br/>AEROSPACE</b>                                                                                                                                                                        |                              |
| TITLE<br><b>PUSH OUT/PRESS IN TOOL</b>                                                                                                                                                           |                              |
| DWG NO.<br><b>RBET17-15004W6-13</b>                                                                                                                                                              | REV<br><b>1</b>              |
| MAT'L WHITE DELRIN/ACETAL<br>UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>.XXX $\pm .005$ FRACTIONS $\pm 1/8$<br>.XX $\pm .01$ ANGLES $\pm .5^\circ$<br>.X $\pm .1$ SURFACES = 125/ |                              |
| SPEC<br>1. BREAK ALL SHARP EDGES<br>.015 $\times 45^\circ$ OR .015R<br>2. DIMENSIONAL LIMITS APPLY<br>AFTER PLATING<br>3. INTERPRET DIM AND TOL PER<br>ASME Y14.5M-2009                          |                              |
| DRAWN BY:<br><b>MACKOVJAK</b>                                                                                                                                                                    | USED ON MODEL<br><b>H145</b> |
| CHECKED:<br><b>CLOUGH</b>                                                                                                                                                                        |                              |
| OPPS APPR:<br><b>ANDERSON</b>                                                                                                                                                                    |                              |
| QA APPR:<br><b>LINDSAY</b>                                                                                                                                                                       |                              |
| APPROVED:<br><b>GILBERT</b>                                                                                                                                                                      |                              |
| SCALE<br><b>1:1</b>                                                                                                                                                                              | DATE<br><b>8/17/2016</b>     |
| SHEET 7 OF 12                                                                                                                                                                                    |                              |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|------------------------|--|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |              |                        |  |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | MRB (QSI042) |                        |  |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |              | Completed By           |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              | Lead hand / Supervisor |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              | QC / QA Coordinator    |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |  |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |              |                        |  |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |  |  |